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10/065,523	10/25/2002	David W. McCulloch	3810.19	2139

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EXAMINER

GAY, JENNIFER HAWKINS

ART UNIT PAPER NUMBER

3672

DATE MAILED: 02/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

SW

Office Action Summary

Application No.

10/065,523

Applicant(s)

MCCULLOCH ET AL.

Examiner

Jennifer H Gay

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-9,11-18 and 20-35 is/are rejected.
- 7) ☒ Claim(s) 4,10 and 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 October 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to because both Figures 6 and 7 depict two figures thus should be changed to Figures 6a, 6b, and 7a, 7b. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 82. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 72. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because on page 11, line 2, "Fig. 11" should be changed to -Fig. 12--.

Appropriate correction is required.

Claim Objections

5. Claims 4-6, 8, 10, 17, 19, and 30-35 are objected to because of the following informalities:
 - In line 3 of claims 4 and 10 and line 4 of claim 19, "a" should be deleted.
 - In line 1 of claims 5 and 6, "a degree" should be changed to --the degree--.
 - In line 6 of claim 8, "andpivoting" should be changed to --and pivoting--.

Art Unit: 3672

- In claim 17, “a well head comprising” should be changed to --a well head, the apparatus comprising-- due to the former causing the remainder of the claim to be part of the well head.
- Claim 30 recites the limitation "the support base" in line 2. There is insufficient antecedent basis for this limitation in the claim.
- In claims 31-35, “the apparatus” should be changed to --the vehicle-- to conform with claim 29 from which they depend.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 5-9, 11-13, 16-18, and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sizer et al. (US 4,251,176) in view of McCafferty et al. (US 6,273,188).

Regarding claim 1: Sizer et al. discloses a method for hoisting and positioning oilfield equipment over a wellhead. The method involves the following steps:

- Coupling the oilfield equipment to a mast **110** having two telescoping arms **111, 112**.
- Lifting the oilfield equipment by extending the arms.

Sizer et al. discloses all of the limitations of the above claims except for pivoting the arms to position the equipment over the wellhead.

McCafferty et al. discloses a hoisting and positioning device similar to that of Sizer et al. McCafferty et al. further teaches the mast **30** includes arms **34** that are pivotable about a point **34A** to position oilfield equipment over the wellhead.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified Sizer et al. such that the arms were

Art Unit: 3672

pivotable to position oilfield equipment over the wellhead as taught by McCafferty et al. in order to have been able to move the equipment between a stored and operable position without removing equipment (1:10-18). One would have been motivated to make such a combination because a means of reducing the time of wellbore operations would have been obtained, as taught by McCafferty et al.

Regarding claims 2, 7, and 20: As seen in Figure1 of McCafferty et al., the arms 34 are pivotally attached to the back of a vehicle.

Regarding claims 3 and 18: The arms of Sizer et al. include two segments 111, 112 that are extendable relative to each other and are locked in position by a latch assembly 170.

Regarding claims 5, 6, 22, and 23: Though not specifically disclosed in either Sizer et al. or McCafferty et al., it would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have automatically limited the degree to which the arms pivoted based on the amount the two arms were extended in order to have automatically prevented the vehicle from tipping or the arms from bowing due to much weight on the system.

Regarding claim 17: Sizer et al. discloses a system for hoisting oilfield equipment over a wellhead. The system includes the following features:

- A mast 110 that includes two telescoping arms coupled to a support base 105.
- The arms are formed from a plurality of extending segments 111, 112 that extend and retract in unison so that the equipment positioned between the arms may be lifted and positioned over the wellhead.

Sizer et al. discloses all of the limitations of the above claims except for pivoting the arms to position the equipment over the wellhead.

McCafferty et al. discloses a hoisting and positioning device similar to that of Sizer et al. McCafferty et al. further teaches the mast 30 includes arms 34 that are pivotable about a point 34A to position oilfield equipment over the wellhead.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified Sizer et al. such that the arms were

Art Unit: 3672

pivotable to position oilfield equipment over the wellhead as taught by McCafferty et al. in order to have been able to move the equipment between a stored and operable position without removing equipment (1:10-18). One would have been motivated to make such a combination because a means of reducing the time of wellbore operations would have been obtained, as taught by McCafferty et al.

Regarding claims 21 and 24: A hydraulic cylinder 62 pivots the mast of McCafferty et al.

Regarding claims 25 and 26: The system of Sizer et al. further includes a cross member 113 positioned between the upper ends of the two arms and moves with the arms as they are extended. The oilfield equipment to be hoisted and positioned is attached to the cross member. McCafferty et al. teaches a cross member that further includes a trolley for laterally moving the latch to which the equipment, i.e. coiled tubing injector 36 is attached.

8. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sizer et al. (US 4,251,176) in view of McCafferty et al. (US 6,273,188) as applied to claims 8, 13, 17, 26, and 29 above, and further in view of Andreychuk (US 6,003,598).

Regarding claim 27: Sizer et al. and McCafferty et al. disclose all of the limitations of the above claims except for a blowout preventer being mounted between the arms.

Andreychuk discloses an oilfield equipment hoisting and positioning system similar to that of Sizer et al. and McCafferty et al. Andreychuk further teaches using the system to position a blowout preventer and a coiled tubing injector (see Abstract).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified Sizer et al. in view of McCafferty et al. to include a blowout preventer in order to have eliminated the cost of having to refit the mast to when switching operations (1:65-2:5). One would have been motivated to make such a combination because a means for preventing the need for another apparatus for installing the blowout preventer would have been obtained, as taught by Andreychuk (1:45-55).

Art Unit: 3672

Regarding claim 28: The blowout preventer of Andreychuk would slide laterally on the trolley of McCafferty et al.

9. Claims 8, 9, 11-13, 16, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCafferty et al. (US 6,273,188) in view of Sizer et al. (US 4,251,176).

Regarding claim 8: McCafferty et al. discloses a method for hoisting oilfield equipment over a wellhead. The method involves the following steps:

- Transporting the equipment and a mast **30** to a wellhead on a vehicle **10** where the mast includes a pair of arms **34** pivotally mounted to the back of the vehicle.
- Coupling the equipment to the mast when the mast is in a retracted position (1:10-18).
- Lifting the equipment and pivoting the arms to position the equipment over the wellhead.

McCafferty et al. discloses all of the limitations of the above claims except for the arms being telescopic.

Sizer et al. discloses an oilfield equipment hoisting and positioning system similar to that of McCafferty et al. Sizer et al. further teaches that the mast **110** includes two telescoping arms **111**, **112**.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified McCafferty et al. to include the two telescopic arms taught by Sizer et al. in order to have provided a hoisting and positioning system that was capable of being used to secure equipment to a wellhead under pressure (1:45-47). One would have been motivated to make such a combination because a system that could be used on a wellhead of any height would have been obtained, as taught by Sizer et al. (2:11-13).

Regarding claim 9: The arms of Sizer et al. include two segments **111**, **112** that are extendable relative to each other and are locked in position by a latch assembly **170**.

Regarding claims 11, 12, and 31: Though not specifically disclosed in either Sizer et al. or McCafferty et al., it would have been considered obvious to one of ordinary skill

Art Unit: 3672

in the art, at the time the invention was made, to have automatically limited the degree to which the arms pivoted based on the amount the two arms were extended in order to have automatically prevented the vehicle from tipping or the arms from bowing due to much weight on the system.

Regarding claim 13: The oilfield equipment is a coiled tubing injector 36.

Regarding claim 16: The equipment is placed between the two arms of the mast during transport and then is pivotable between a stowed and an operating position.

Regarding claim 29: McCafferty et al. discloses a vehicle for hoisting oilfield equipment over a wellhead. The vehicle includes the following features:

- A mast 30 that has a pair of arms 34 pivotally attached to the rear of the vehicle 10.
- A mounting 32 for transporting the equipment between the two arms and movable, with the arms, between a stowed and operable position.

McCafferty et al. discloses all of the limitations of the above claims except for the arms being telescopic.

Sizer et al. discloses an oilfield equipment hoisting and positioning system similar to that of McCafferty et al. Sizer et al. further teaches that the mast 110 includes two telescoping arms 111, 112 that extend and retract in unison.

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified McCafferty et al. to include the two telescopic arms taught by Sizer et al. in order to have provided a hoisting and positioning system that was capable of being used to secure equipment to a wellhead under pressure (1:45-47). One would have been motivated to make such a combination because a system that could be used on a wellhead of any height would have been obtained, as taught by Sizer et al. (2:11-13).

Regarding claim 30: The vehicle further includes a hydraulic cylinder 62 coupled between the mast and a support base for moving the arms.

Regarding claim 32: The vehicle further includes a cross member 38 coupled between the upper ends of the arms. The cross member includes a latching mechanism to which equipment may be attached.

Art Unit: 3672

10. Claims 14, 15, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCafferty et al. (US 6,273,188) in view of Sizer et al. (US 4,251,176) as applied to claims 8 and 13 above, and further in view of Andreychuk (US 6,003,598).

Regarding claims 14, 15, and 33: McCafferty et al. and Sizer et al. disclose all of the limitations of the above claims except for a blowout preventer being mounted between the arms.

Andreychuk discloses an oilfield equipment hoisting and positioning system similar to that of Sizer et al. and McCafferty et al. Andreychuk further teaches using the system to position a blowout preventer and a coiled tubing injector (see Abstract).

It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified McCafferty et al. Sizer et al. to include a blowout preventer in order to have eliminated the cost of having to refit the mast to when switching operations (1:65-2:5). One would have been motivated to make such a combination because a means for preventing the need for another apparatus for installing the blowout preventer would have been obtained, as taught by Andreychuk (1:45-55).

Regarding claims 34 and 35: The blowout preventer of Andreychuk would slide laterally on the trolley of McCafferty et al.

Allowable Subject Matter

11. Claims 4, 10, and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The remaining references made of record disclose various methods and systems for hoisting and positioning oil field equipment over a wellhead.

Art Unit: 3672

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer H Gay whose telephone number is (703) 308-2881. The examiner can normally be reached on Monday-Thursday, 6:30-4:00 and Friday, 6:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (703) 308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Bagnell
Supervisory Patent Examiner
Art Unit 3672

JHG
February 11, 2004